

Dong Heon Han

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Robotics Department, University of Michigan, Ann Arbor, MI 48109, USA

Robot Collectives | Artificial Intelligence | Soft Robotics

EDUCATION

- **University of Michigan** 2029
PhD in Robotics Ann Arbor, MI
- **University of Michigan** 2025
MS in Mechanical Engineering Ann Arbor, MI
- **Georgia Tech** 2021
BS in Mechanical Engineering Atlanta, GA

EXPERIENCE

- **University of Michigan | Robotics Department** May 2025 - Present
Research Assistant Ann Arbor, MI
- **University of Michigan | Mechanical Engineering Department** Aug 2023 - May 2025
Research Assistant Ann Arbor, MI
- **Republic of Korea Army** Jan 2022 - July 2023
Signal Specialist Korea
- **Seoul National University | Biosystems Engineering Department** Aug 2021 - Dec 2021
Research Assistant Seoul, Korea
- **George W. Woodruff School of Mechanical Engineering** Aug 2019 - Aug 2021
Research Assistant Atlanta, GA
- **Korean Institute of Machinery and Materials** Jun 2018 - Aug 2018
Research Assistant Daejeon, Korea

PATENTS AND PUBLICATIONS

C=CONFERENCE, J=JOURNAL, P=PATENT, S=IN SUBMISSION, T=THESIS

- [C.1] R. Zuo, M. Mehta, **D.H. Han**, D. Bruder. "Embedded Valves for Distributed Control of Soft Pneumatic Actuators". 2024 IEEE International Conference on Intelligent Robots and Systems (IROS)
- [C.2] **D.H. Han**, S.J. Byeon, K.D. Kim, G.H. Han, M.H. Cha, Y.J. Park. "Development of Path Tracking Control Algorithm for Tractor Autonomous Driving". 2021 Korean Society for Agricultural Machinery Conference
- [P.1] **Blowers With Variable Nozzles**. US 11668311 B2. Issued June 6, 2023.
- [T.1] **D.H. Han**. "Towards a universal sensing framework for soft robots" 2025
- [S.1] **D.H. Han**, M. Mehta, R. Zuo, Z. Wanger, and D. Bruder. "An Enhanced Proprioceptive Method for Soft Robots Integrating Bend Sensor and IMU"
- [S.2] **D.H. Han**, D. Bruder. "Shape-Morphing Strain Sensing Structure for Enhanced Proprioception in Soft and Wearable Robots"
- [S.3] **D.H. Han**, X. Xu, X. Huang. "Towards Bio-Inspired Dexterity: Adaptive Collaborative Grasping via Distributed Self-Sensing Soft Actuators"

HONORS AND AWARDS

- **VIP Innovation Competition, 1st Place in Hardware, Devices & Robotics Track** Apr 2021
Georgia Tech
 - Awarded to the most innovative and active research team in Georgia Tech
- **President's Undergraduate Research Award** Oct 2020
Georgia Tech
 - Research excellence scholarship as an undergraduate researcher at Georgia Tech
- **Georgia Korean American Grocers Association Scholarship Award** Dec 2016
KAGRO
 - Awarded for academic excellence and leadership in community service
- **Kappa Mu Epsilon** May 2018
Mathematics honor society